

WHAT IS CLAIMED IS:

1. A thermistor comprising:

5 a resistance element having upper and lower surfaces and showing a resistance
varying characteristics according to the change of temperature;

first and second conductive layers formed on the upper surface of the resistance
element, the first and second conductive layers being adjacently engaged to each other
with a non-conductive gap interposed therebetween;

10 first and second electrodes formed on the lower surface of the resistance element
and electrically separated from each other;

a first connector for electrically connecting the first conductive layer to the first
electrode; and

a second connector for electrically connecting the second conductive layer to the
second electrode.

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2. A thermistor according to claim 1,

wherein, when voltages having opposite polarities are applied to the first
electrode and the second electrode, a current path is formed between the adjacent first
and second conductive layers via a region where the non-conductive gap of the resistance
20 element is formed.

3. A thermistor according to claim 1,

wherein the first and second conductive layers and the first and second electrodes
are arranged so that the first conductive layer and the second electrode are substantially
25 opposite to each other with interposing the resistance element therebetween, and the

second conductive layer and the first electrode are substantially opposite to each other with interposing the resistance element therebetween.

4. A thermistor according to claim 1,
5 wherein the non-conductive gap has a width smaller than a thickness of the resistance element.

5. A thermistor according to claim 1,
wherein the resistance element is a polymer having a positive temperature
10 coefficient.

6. A thermistor according to claim 1,
wherein the first and second conductive layers are made of copper or copper alloy.

15 7. A thermistor according to claim 1,
wherein the first and second electrodes are made of copper or copper alloy.

8. A thermistor according to claim 1,
wherein the first connector electrically connects the first conductive layer to the
20 first electrode via one side of the resistance element, while the second connector electrically connects the second conductive layer to the second electrode via the other side of the resistance element.

9. A thermistor according to claim 1,
25 wherein the resistance element has through holes at both sides,

wherein the first connector electrically connects the first conductive layer to the first electrode through the through hole at one side of the resistance element, while the second connector electrically connects the second conductive layer to the second electrode through the through hole at the other side of the resistance element.

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10. A thermistor according to claim 1,

wherein the non-conductive gap has a shape of concavo-convex patterns, whose shapes is rectangular, triangular, zigzag or waved.

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11. A thermistor according to claim 1,

wherein the first and second electrodes being adjacently engaged to each other with a non-conductive gap interposed therebetween.